ACCESSION NR: AP4041041 S/0120/64/000/003/0157/0159

AUTHOR: Zhegunov, Yu. P.; Kadomtseva, A. M.; Levitin, R. Z.

TITLE: Measuring magnetization in strong impulse magnetic fields by a ponderomotor method

SOURCE: Pribory* i tekhnika eksperimenta, no. 3, 1964, 157-159

TOPIC TAGS: magnetization measurement, intensity of magnetization, ponderomotor magnetization measurement

ABSTRACT: A method is suggested for measuring the intensity of magnetization in small (10—100 mg) specimens, such as single crystals, in strong (up to 300 kilo-oerst.) magnetic fields by the force pulling the specimen into a nonuniform magnetic field. The impulse field is built up in a bronze coil through which a 1,500-microfarad capacitor bank is discharged from an initial voltage of 5 kv. A specimen fastened by means of a thin porcelain rod to an electromagnetic-sensor

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diaphragm was introduced into the coil field. A tiny probe coil placed near the specimen served for measuring the field strength. Emf's from both these sources were recorded on a 2-beam cathode-ray oscillograph, and the oscillogram was used for plotting a field-strength vs. intensity-of-magnetization curve. The error of magnetization measurement is claimed to be 10%. "The authors are deeply grateful to K. P. Belov for his constant interest in the work, and to S. F. Litvinenko for aligning the impulse-magnetic-field outfit." Orig. art. has: 4 figures and 8 formulas.

ASSOCIATION: Moskovskiy gosudarstvenny*y universitet im. M. V. Lomonosova (Moscow State University)

SUBMITTED: 06Jul63 ENCL: 00

SUB CODE: EM NO REF SOV: 001 OTHER: 003

Card: 2/2

MATZKO, S.N.; GORBOUNOVA, V.I.; NISOVA, A.A.; [redacted], A.T.; GALKINA, A.F.

Criteria of vitamin C supply of the body. (Results of observations carried out on animals). J. hyg. epidem. 6 no.4:399-406 '62.

1. L'Institut de Vitaminologie du Ministere de la Sante de l'URSS, Moscou.

(ASCORBIC ACID)

S/003/60/000/009/001/001
B019/B054

AUTHOR: Frankl', F. I., Doctor of Physical and Mathematical Sciences, Professor

TITLE: Discussion of Problems of Hydroaerodynamics and Mathematical Physics

PERIODICAL: Vestnik vysshey shkoly, 1960, No. 9, pp. 47-48

TEXT: A Conference on Hydroaerodynamics and Mathematical Physics was held at Nal'chik in May 1960 on the initiative of the fiziko-matematicheskiy fakul'tet Kabardino-Balkarskogo universiteta (Department of Physics and Mathematics of the Kabardino-Balkarian University). Fourteen reports were delivered at the Conference by delegates of five higher institutes of learning and scientific institutes of the Northern Caucasus, as well as of three higher institutes of learning from other oblast' and Republics. The reports by Professor F. I. Frankl' and Senior Teacher I. N. Lanin (Kabardino-Balkarian University) on "The Flow Around Profiles With a Local Supersonic Zone Ending in a Compression

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Shock", by Professor S. V. Fal'kovich of Saratovskiy universitet (Saratov University) on "The Integrals of the Chaplygin Equation With Singular Points on the Parabolic Line", and Senior Teacher E. Kerimbekov of Kirgizskiy universitet (Kirgiz University) on "The Application of the Straight-line Method to Certain Boundary-value Problems in the Theory of Transsonic Currents" dealt with the theory of transsonic currents. Problems of theoretical meteorology were dealt with in the report by L. N. Gutman, Doctor of Physical and Mathematical Sciences, of the Kabardino-Balkarskoye otdeleniye Instituta prikladnoy geofiziki AN SSSR (Kabardino-Balkarian Branch of the Institute of Applied Geophysics of the AS USSR) ("On the Theory of Cyclones"). Docent E. Ya. Slobodov of the Stavropol'skiy sel'skokhozyaystvennyy institut (Stavropol' Agricultural Institute) dealt with "Some Problems of Hydrodynamics Within the General Theory of Atmospheric Circulations". Mal'bakhov, Student of the Kabardino-Balkarian University, held a report on "The Vertical Structure of Monsoons". M. Zhekamukhov and N. Arkhabayev, Post-graduate Students of the Kabardino-Balkarian University, offered "Examples of the Rotation of Cosmic Gas Masses" and "The Model of a Star

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as Steady Radial Flow of Gas Particles and Photon Gas". A. Abdyldayev, Post-graduate Student of the Kabardino-Balkarian University, in his report dealt with "Some Problems of the Plane-parallel Flow of Heavy Liquids in Channels". Senior Teacher V. I. Men'shikova of the Stavropol'skiy pedagogicheskiy institut (Stavropol' Pedagogical Institute) delivered a report on "Semi-inverse Methods in the Theory of Motion of Ground Water With a Free Surface". Problems of mathematical physics were dealt with in three reports by Senior Teacher I. M. Karasev of the Kabardino-Balkarian University, Docent F. G. Baranovskiy of the Severoosetinskiy pedagogicheskiy institut (North Ossetian Pedagogical Institute), and Docent Ye. I. Kosis of the Stavropol' Pedagogical Institute. Docent V. N. Karp of the Odesskiy politekhnicheskiy institut (Odessa Polytechnic Institute) dealt with the theory of oscillations. Special attention was paid to a report by Professor S. V. Fal'kovich who suggested a greatly improved method of calculating transsonic currents, to a report by Professor L. N. Gutman who suggested an interesting solution to one of the most important problems of local meteorological phenomena, and to a report by N. Arkhabayev who gave an ingenious explanation of an important astrophysical

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phenomenon.

ASSOCIATION: Kabardino-Balkarskiy gosudarstvennyy universitet (Kabardino-Balkarian State University)

ACCESSION NR: AP4041436 S/0188/64/000/003/0047/0051

AUTHOR: Zhekamukhov, M. K.

TITLE: Some stationary movements in magnetic gas dynamics

SOURCE: Moscow. Universitet. Vestnik. Seriya 3. Fizika, astronomiya, no. 3, 1964, 47-51

TOPIC TAGS: astrophysics, sun, star, solar magnetic field, stellar magnetic field, dipole center, electrical conductivity, magnetic field, magnetic rotating field, magnetism, gas dynamics

ABSTRACT: The investigation of the stationary movements of gravitating gaseous masses in a magnetic field is of interest to astrophysics since many stars have strong magnetic fields but the material of which they are composed is a good conductor of electricity. Consequently, the magnetic field of a star exerts an influence on the flow of gaseous masses both inside and on the surface of the star. The author now considers the flow of gas under the influence of gravitational and magnetic forces, beginning with the rotation of a conducting gaseous sphere in a magnetic field. Suppose that the magnetic field of a star or gaseous nebula has the form of concentric circles with centers on the axis of rotation. In the absence of a magnetic field, a rotating gaseous mass will be stretched out along the

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ACCESSION NR: AP4041436

equator and will have the approximate form of an ellipsoid of rotation. The presence of a magnetic field means that the gas particles rotating around the axis of symmetry will be affected by both the Lorentz force, directed toward the axis of rotation, and centrifugal force. In the configuration examined, the gaseous mass has the form of a sphere, which is possible only when the centrifugal force is equal to the Lorentz force. Equations for this condition are derived. The author then considers the particular case of an impotent field. It is known that impotent fields are defined by the equation

$$[\vec{H}\,rot\,\vec{H}] = 0. \qquad (1)$$

The particular solution of the equation representing a helical line was obtained in the work of S. I. Syrovatskiy (Uspekhi fizicheskikh nauk, 62, vyp. 3, 247, 1957). However, it was assumed that rot $\vec{H} \neq 0$. On the other hand, the present author considers a magnetic field in a moving medium in which the field satisfied the equation

$$rot\,\vec{H} = 0, \qquad (2)$$

Finally, the author discusses the motion of a charged particle at the surface of the Sun, considering the magnetic field of the sun to be the field of a dipole, the axis of which nearly coincides with the axis of rotation of the sun. The

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equations derived indicate clearly that under these conditions no individual charged particle would be able to escape from the surface of the Sun, no matter what its initial energy. Thus, either the Sun must not act as a dipole, or the particles must escape in the form of quasi-neutral ionic clouds. "The author expresses thanks to Professors K. P. Stanyukovich and S. B. Pikel'ner as well as to Candidate of Physical and Mathematical Sciences M. I. Kiselev for helpful advice." Orig. art. has: 15 formulas.

ASSOCIATION: Kafedra teoreticheskoy fiziki Moskovskogo universiteta (Department of Theoretical Physics, Moscow University)

SUBMITTED: 22Jun63 ENCL: 00

SUB CODE: AA, EM NO REF SOV: 004 OTHER: 004

Card 3/3

ACCESSION NR: AP4043795 S/0188/64/000/004/0023/0028

AUTHOR: Zhekamukhov, M. K.

TITLE: Steady state rotation of a rarefied gravitating gas mass in a magnetic field

SOURCE: Moscow. Universitet. Vestnik. Seriya 3. Fizika, astronomiya, no. 4, 1964, 23-28

TOPIC TAGS: theoretical physics, magnetic field, gravitating gas mass, magnetohydrodynamics, interstellar medium, galaxy, gas movement, rarefied gas, gas mass rotation

ABSTRACT: The author discusses the steady-state, axially symmetrical rotation of a rarefied gravitating gas mass in an internal magnetic field when it is possible to neglect pressure forces. The linear dimensions of gas masses in space greatly exceed the length of the free path of gas particles; therefore, despite low density, they can be considered a continuous medium whose behavior is described by a system of magnetohydrodynamic equations. Gas masses in space are usually ionized strongly by the radiation of bright stars and are therefore good electrical conductors. In their study it is customary to consider their conductivity to be equal to infinity. This condition is satisfied particularly well for gas masses whose density is relatively great. In this paper it is assumed that the conductivity of the rarefied medium is quite great, but finite. Limited conductivity

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leads to dissipation of the magnetic field and as a result it attenuates with time. The attenuation time is $\sim 4\pi\delta L^2$, where L is a length of the order of the dimension of the region. It follows that for gas masses in space, occupying an enormous volume, the attenuation time of a magnetic field greatly exceeds the age of the Galaxy. Therefore, despite the finite conductivity of the medium the magnetic field can be considered constant in time. The equations of magnetohydrodynamics in the considered case have the form:

$$(\vec{u}\nabla)\vec{u} + \frac{1}{4\pi\rho}[\vec{H}\,\mathrm{rot}\,\vec{H}] = \mathrm{grad}\,V, \qquad (1)$$

$$\mathrm{rot}\,[\vec{u}\vec{H}] + \lambda\Delta\vec{H} = 0, \qquad (2)$$

$$\mathrm{div}\vec{H} = 0, \qquad (3)$$

$$\Delta V = 4\pi\rho G. \qquad (4)$$

where V is gravity potential, $\lambda = \frac{c^2}{4\pi\sigma}$, σ is the electrical conductivity of matter and ρ is gas density. The remaining notations are those generally used. Solution of equations (1)-(4) in a general case is very difficult; the author therefore considers several

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special cases corresponding to different forms of magnetic lines of force. A cylindrical coordinate system is used in which the z-axis coincides with the axis of symmetry and the origin of coordinates coincides with the center of mass. Three cases are considered: 1. The vector of strength of the magnetic field has the form $\vec{H}(H_r, H_\varphi, 0)$; 2. the vector has the form $\vec{H}(0, 0, Hz)$; 3. the vector has the form $\vec{H}(0, H_\varphi, 0)$ (the magnetic lines of force are concentric circles with centers on the axis of symmetry). Special cases with pressure forces taken into account are also considered. "In conclusion, the author thanks Professor K. P. Stanyukovich for useful advice." Orig. art. has: 28 formulas and 1 figure.

ASSOCIATION: Kafedra teoreticheskoy fizikl Moskovskogo universiteta (Department of Theoretical Physics, Moscow University)

SUBMITTED: 13Apr63 ENCL: 00

SUB CODE: AA NO REF SOV: 005 OTHER: 004

Card 3/3

CHEKAMUKHOV, M.K.

Certain steady motions in magnetohydrodynamics. Vest. Mosk. un. Ser. 3: Fiz., astron. 19 no.3:47-51 My-Je '64.

(MIRA 17:11)

1. Kafedra teoreticheskoy fiziki Moskovskogo universiteta.

ZHEKAMUKHOV, M.K.

Stationary rotation of rarefied gravitating gaseous mass in a magnetic field. Vest. Mosk. un. Ser. 3: Fiz., astron. 19 no.4:23-28 Jl-Ag '64. (MIRA 17:10)

1. Kafedra teoreticheskoy fiziki Moskovskogo universiteta.

ZHEKOV, S., d-r

Microbiological control of the air. Nauka i tekh mladezh 16 no.12: 36-38 '64.

PETKOV, V.; ZHEKOV, S.

Study of the effect of the plant Astragalus glycyphillus on the fertility of experimental animals. Akush. ginek. (Sofiia) 4 no.2:87-93 '65.

1. Institut za spetsializatsiia i usuvurshenstvuvane na lekarite, Sofiia, Katedra po farmakologiia (rukovoditel: prof. V. Petkov).

ZHEKOV, St.

A killed vaccine against fowl cholera. Izv Vet inst zaraz parazit 9 :111-115 '63

S/124/62/000/011/004/017
D234/D308

AUTHOR: Zhekamukhov, M. K.

TITLE: Stationary axially symmetric flows of cosmic gas masses

PERIODICAL: Referativnyy zhurnal, Mekhanika, no. 11, 1962, 17, abstract 11B101 (Uch. zap. Kabardino-Balkarsk. un-t, 1961, no. 13, 38-41)

TEXT: The author studies potential flows of gas filling the whole space in gravitational self field. Velocities are assumed to be small and the effect of gas motion on density and pressure distribution is neglected. Under these assumptions a solution is obtained for the flow function as an expansion in Legendre polynomials. A solution corresponding to a ring-shaped vortex is constructed. The geometrical picture of flow is not given. The solution obtained is not compared with the well-known solution which does not take gravitation into account. The validity of the assumption about the smallness of velocities is not discussed. [Abstracter's note: Complete translation.]

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ZHEKOV, AL.

Determining the Sounding Coordinates in Geological Prospecting Operations. Minno Delo (Mining), #2:69:Feb 55

BULGARIA

ZHEKOV, A. [Affiliation not given.]

"Improving the Hygienic Standards of Milk and Milk Products in Our Country."

Sofia, Veterinarna Sbirka, Vol 60, No 4, 1963; p 22.

Abstract: Brief report of a national one-day meeting in Sofia in February 1962 under sponsorship of 3 ministries concerned with agricultural production. Some random economic and agricultural data from various districts and Bulgaria as a whole are given as reported at the meeting; in general, the conclusion was that there is rapid improvement in dairy sanitation taking place all over the country at present although much remains to be done.

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ZHEKOV, A.

"Determining the Coordinates of Crosscuts in Boring for Useful Underground Material", P. 45, (MINNO DELO, Vol. 9, No. 3, Mar. 1954, Sofiya, Bulgaria)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4, No.1, Jan. 1955, Uncl.

ZHEKOV, AL.

Concerning Some Peculiarities of Topographical Surfaces in Connection of Prospecting of Useful Minerals. Minno Delo (Mining), #4:86: Jul-Aug 55

ZHEKOV, GAVRAIL

Zhekov, Gavrail - Motori s vutreshno gorene. Sofiya (Narodna prosveta) 1951)
Vol. 2. (Internal combustion motors; for the upper grades in mechanical-technical schools)

SO: Monthly List of East European Accessions, Library of Congress, Vol. 2, No. 9, Oct. 1953, Uncl.

ZHEKOV, GAVRAIL.

Zhekov, Gavrail Motori s vutreshno gorene. Za IV mashino-dvigatelen kurs na tekhnikumite po mekhanotekhnika. Sofiya (Naroda prosveta) 1952 Vol. 1 (Internal combustion engines; a textbook for the 4th year of schools of mechanical engineering. Pt. 1)

SO: Monthly List of East European Accessions, L.C. Vol. 1 No. 1. Jan '54 Uncl.

ZHEKOV, K.A., inzh.

Using the method of lattices in the strength analysis of stubby wings. Vop. proch. i ustoich. elem. tonkosten. kon. no.1:195-214 '63. (MIRA 17:1)

ZHEKOV, Kr.

Prevention and correction of deformities in tuberculous spondylitis. Khirurgiia, Sofia 10 no.9:826-832 1957.

1. Detski sanatorium za kostno-stavna tuberkuloza prof. P. Stoianov; Varna G1, lekar: Al. Kiulevcheliev.
(TUBERCULOSIS, SPINAL, in infant and chil., prev. & ther. of deformities (Bul))

KIULEVCHELIEV, Al.; STOIANOV, St.; ZHEKOV, Kr.

Our experience with complex conservative therapy of tuberculous spondylitis in children. Khirurgiia 15 no.2/3:201-204 '62.

1. Iz Detski sanatorium za kostno-stavna tuberkuloza - Varna.
(TUBERCULOSIS SPINAL in inf & child)

ZHEKOV, K.A.

Applying the method of finite differences in designing cantilever plates. Izv.vys.ucheb.zav.; av.tekh. 5 no.1:41-56 '62.
(MIRA 16:7)

1. Moskovskiy aviatsionnyy institut, kafedra No. 106.
(Elastic plates and shells)

S/2942/63/000/001/0195/0214

ACCESSION NO: AT3003032

AUTHOR: Zhekov, K. A. (Engineer)

TITLE: Calculation of the strength of short wings using finite difference methods

SOURCE: Moscow. Aviatsionny*y institut. Voprosy prochnosti i ustoychivosti elementov tonkostenny*kh konstruktsiy, no. 1, 1963, 195-214

TOPIC TAGS: wing strength, wing strength calculation, finite difference method, partial differential equations, differential equation computer solution, computer solution

ABSTRACT: A finite difference method to be used with computers for determining the strength of short wings of arbitrary cross section and variable thickness (but with isotropic properties or sufficiently closely spaced ribs to permit isotropic assumption) is presented. An example of a short triangular wing with a rhombic cross section is used to demonstrate the method, and results are compared with experiment. The method uses the known partial differential equation for bending of a variable thickness plate with the additional relations

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$$\left.\begin{aligned} \sigma_x &= \frac{Eh}{2(1-\nu)}\left(\frac{\partial^2 w}{\partial x^2}+\nu\frac{\partial^2 w}{\partial y^2}\right);\\ \sigma_y &= \frac{Eh}{2(1-\nu)}\left(\frac{\partial^2 w}{\partial y^2}+\nu\frac{\partial^2 w}{\partial x^2}\right);\\ \tau_{xy} &= Gh\frac{\partial^2 w}{\partial x\,\partial y}; \end{aligned}\right\}$$

(normal nomenclature, w = deflection of neutral plane) and boundary conditions:

(a) built-in end $w = 0$, $\frac{\partial w}{\partial n} = 0$; (b) free end

$$M_n = -D\left(\frac{\partial^2 w}{\partial n^2}+\nu\frac{\partial^2 w}{\partial t^2}\right)=0,\quad R_n = Q_n+\frac{\partial M_{nt}}{\partial t}=0.;$$

(c) pivoted end $w=0$, $M_n = -D\left(\frac{\partial^2 w}{\partial n^2}+\nu\frac{\partial^2 w}{\partial t^2}\right)=0.$ These equations are combined, and, using the usual finite difference expressions (error of order Δx^2, Δy^2) for the partial derivatives, they are expressed in finite difference form. The finite difference patterns used for different boundary conditions are shown in Fig. 1 on the Enclosure. The sample wing has a 45° leading edge and a straight trailing edge; the relative thickness at the center of the chord is h = 2.8%. The wing was assumed built-in along the entire chord (b = 550 mm). A 20 point pattern ($\Delta y = \Delta x$)

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distributed over the triangular wing was used. Even with this comparatively crude pattern the theoretical wing deflection obtained was only 13% in error. Orig. art. has: 5 figures, 3 tables, and 23 formulas.

ASSOCIATION: Moscow. Aviatsionny*y institut (Moscow Aviation Institute)

SUBMITTED: 00 DATE ACQ: 27Jun63 ENCL: 02

SUB CODE: AP, CP NO REF SOV: 004 OTHER: 001

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36704
S/147/62/000/001/006/015
E200/E535

10.6100

AUTHOR: Zhekov, K.A.

TITLE: Application of finite difference equations to solution of cantilevered plates

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Aviatsionnaya tekhnika, no.1, 1962, 41-56

TEXT: Finite difference equations, which lend themselves to computer programming, are set up to determine deflection at any point in a cantilevered plate of uniform thickness and loaded by an arbitrary transverse load. Starting with plate equation

$$\frac{\partial^2 M_x}{\partial x^2} + 2\frac{\partial^2 M_{xy}}{\partial x \partial y} + \frac{\partial^2 M_y}{\partial y^2} = -q, \qquad (1.1)$$

The author develops the following equation for any point inside a regular orthogonal net which represents a given plate

$$C_k W_k + \sum_i C_i W_i = \frac{P_k \Delta S}{D} \qquad (3.8)$$

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where k = 0, I, II, ...,XIX - represents a typical point, i = 1,2,3,...,12 - number of points surrounding the typical point, W - deflection, P - force, ΔS is a parameter of the net. C is given below

C_o	$C_1 = C_2$	$C_3 = C_4$	$C_5=C_6=C_7=C_8$	$C_9=C_{10}$	$C_{11}=C_{12}$
$2\left(\frac{3}{\mu^2}+4+3\mu^2\right)$	$-4\left(1+\frac{1}{\mu^2}\right)$	$-4(1+\mu^2)$	2	$\frac{1}{\mu^2}$	μ^2

Deflections calculated for a trailing edge of a wing using the author's programme were about 9% higher than those obtained by D. Williams in "A general method (depending on the aid of a digital computer) for deriving the structural infenese coefficients of aeroplane wings", London, 1959 (ARC, R and M, No.3048). The matrix equations derived by the author can be used with any type of loading or for natural vibrations calculations. There are 3 figures and 1 table.

ASSOCIATION: Kafedra 106, Moskovskiy aviatsionnyy institut (Department 106, Moscow Aviation Institute)

SUBMITTED: April 24, 1961

COUNTRY : Bulgaria H-28
CATEGORY :

ABS. JOUR. : RZKhim., No. 16 1959, No. 58861

AUTHOR : Daskalov, P. Kh., Tenov, N. S., and Zhekov, P.
INST. : Not given
TITLE : The Continuous Desulfitation of Fruit Pulp Under Pressure

ORIG. PUB. : Khranitelna Promishlenost, 7, No 10, 11-15 (1958)

ABSTRACT : A continuous desulfitator is described. The sulfitated pulp is transferred to a closed storage tank from which it is pumped to a heater for a preliminary desulfitation treatment with live steam (2.5 atm) with heating to a temperature above 100°. The pulp from the heater is passed into a vacuum apparatus [sic: see title] in which the major portion of the SO_2 is separated without heating. The desulfitated pulp containing 50-100 mg SO_2 per kg is transferred to

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CARD: 2/2

ZHEKOV, R.

"Suggestion for saturating animal fats with inactive gases."

KHIMIIA I INDUSTRIIA, Sofiia, Bulgaria, Vol. 31, no. 1, 1959.

Monthly list of East Europe Accessions (EEAI), LC, Vol. 8, No. 6, Jun 59, Unclas

BULGARIA

ZHEKOV, S., RAYNOV, A., MARKOV, K., and PISAREV, S.; Chair of Pathophysiology (Head Prof St. Pisarev) and Chair of Microbiology (Head Prof Sv. Burdarov), Higher Medical Institute, Sofia

"Effect of the Endotoxin of Salmonella Typhimurium on Streptococcal Myocarditis in Rats"

Sofia, Suvremenna Meditsina, Vol 17, No 11, 1966, pp 926-932

Abstract: S. Zhekov (Suvremenna Meditsina, Vol 5, No 6, 70-74, 1954) established that alimentary toxicoinfection caused by S. typhimurium improved considerably the condition of persons with chronic rheumatic fever. In experiments that were conducted, it was found that intraperitoneal injections of S. typhimurium endotoxin had a therapeutic effect in experimental myocarditis of rats produced by infection with beta-hemolytic streptococci. The rate of survival of experimental animals was higher than that of controls. There were considerable differences between experimental and control animals as far as the erythrocyte sedimentation rate and the histomorphological state of various organs were concerned. Tables, 4 references (all Bulgarian). Russian and English summaries. Manuscript received Jul 66.

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KHRKOV, S.

Chronic arthritis following Salmonella toxin infection. Suvrem. med., Sofia 5 no.6:70-74 1954.

1. Iz Nauchnoizsledovatelskiia sanitarno-khigienen institut (direktor: K.Kusitasev)

(ARTHRITIS, bacteriology, Salmonella typhosa)
(SALMONELLA INFECTIONS, typhosa artritis)

"Hygienic Bacteriology in the Service of Food Sanitation." p. 2, (ZDRAVNO DELO, No. 6, No. 5, Oct. 1954, Sofiya, Bulgaria)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4 No. 5, May 1955, Uncl.

ZHEKOV, S.

RUSEV, G., Khr.; ZHEKOV, S., St.

Preparation of anthrax vaccine from non-pathogenic strains of Bacillus anthracis. Izv.mikrob.inst., Sofia 5:229-238 1954.

(VACCINES AND VACCINATION,
anthrax vaccine from non-pathogenic strains)
(ANTHRAX, prevention and control,
vacc., prep. of vaccine from non-pathogenic strains)

ZHEKOV, S.
SURNAME (in caps); Given Names

Country: Bulgaria

Academic Degrees: MD

Affiliation: not indicated

Source: Sofia, Khigiena, No 1, Jan/Feb 61, pp 35-36

Data: "The Second Scientific Session of the Plovdiv Okrug Sanitary and Epidomiological Station (Plovdivska Okruzhna Sanepidstantsiya)."

ZHEKOV, S.A.; DANON, S.M.

Some improvements in fermentative methods for determining the coli titer. Lab.delo 6 no.2:51 Mr-Ap '60. (MIRA 13:6)

1. Nauchno-issledovatel'skiy sanitarno-gigiyenicheskiy institut, Bolgariya.
(BACTERIOLOGY--CULTURES AND CULTURE MEDIA)

S. ZHEKOV

"Prophylactics of nutritional toxic infections," p. 26. (ZDRAVNO DELO, No. 1, Jan. 1952, Sofiya, Bulgaria.)

SO: Monthly List of East European Accessions, Vol. 2 No. 7, July 1953, Uncl.

GENEV, Khristo, d-r; ZHEKOV, St.; VACHEV, Bl.; DENEV, Dr.; IORDANOV, R.

Infectious pneumonias in pigs in Bulgaria. Izv Vet inst zaraz parazit 7 5-20 '63.

1. Member of the Board of Editors, "Izvestiia na Veterarniia institut za zarazni i parazitni bolesti" (for Genev).

VULCHEV, Iv., inzh.; TONCHEV, Iv., inzh. khim.; PEEV, D., fiz.; ZHEKOV, Zh., inzh.

Concerning the article "On the viscosity-temperature properties of the melted ashes of some Bulgarian coals." Elektroenergiia 14 no.11:21-24 N'63.

KHADZHOV, Blagoy, inzh.; ZHEKOV, Zheko, inzh.; TONCHEV, Ivan, inzh.-khimik; PEYEV, Dimo, fizik

Viscosity of the slag of Bulgarian coal mined in "Maritsa-Vostok" and "Chernoe More" Basins. Teploenergetika 12 no.2:87-89 F '65. (MIRA 18:3)

1. Nauchno-issledovatel'skiy institut energetiki, Sofiya.

BULGARIA

STANEV, I, head physician (gl lekar), and ZHIKOV, Zh, of the Okruzh Hospital (Okruzhna bolnitsa), Fazardzhik

"Melanoblastosis of the Pia Mater"

Sofia, Nevrologiya, psikhiatriya i nevrokhirurgiya, Vol 5, No 3, 1966, pp 174-177.

Abstract [Authors' Russian and English summaries, modified]: The article describes primary melanoblastosis of the pia mater in a finely granulated, diffuse form involving mainly the cerebral basic-with metastasis to the basal surface, plexus chorioideus and hypophysis. Clinically, a dienceph-alic syndrome was observed, focal symptoms, diabetes melli-tus,hypertension, etc. The condition had a slow evolution. Histological findings demonstrated characteristic perivascular arrangement of the cells, which were irregularly pigmented with achromatic areas. Oval cells predominated. Fifteen references, including 4 Bulgarian, 3 Russian, 1 German, and 7 Western. (Manuscript received, November 1965).

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ZHEKOV, Zh. - Gorsko Stopanstvo

Lessons from feeding andprotecting partridges during the winter of 1953/54. p. 462
(GORSKO STOPANSTVO Vol. 10, No. 10, Dec. 1954)

SO: Monthly List of East European Accession, (EEAL), LC, Vol. 4, No. 9, Sept. 1955, Uncl.

KHADZHOV, Blagoi, inzh.; ZHEKOV, Zheko, inzh.; TORBOV, Tsvetan, inzh.; TONCHEV, Ivan, inzh. khim.

The Lurgi fire grate and its applicability to Bulgarian coals. Tekhnika Bulg 11 no.9:337-339 '62.

ZHEKOV, ZH.

"Fight against the menace of wolves during the winter" (p.77) GORSKO STOPANSTVO (Upravlenie Na Gorskoto Stopanstvo Kum Ministerskiia Suvet) Sofiya Vol 10 No 1 Jan 1954

SO: East European Accessions List Vol 2 No 7 Aug 1954

DONCHEV, St.; KHADZHOV, Bl.; VELEV, V.; ZHEKOV, Zh.

Combustion of the Maritsa-Istok and Black Sea coals in horizontal cyclone furnaces. Godishnik khim tekh 9 no.3: 45-58 '62 [publ. '63]

DONCHEV, Stefan, insh.; KHADZHOV, Blagoi, insh.; ZHEKOV, Zheko, insh.; VELEV, Velo, insh.

Research on burning of black and brown coal in horizontal cyclone furnace. Tekhnika 10 no.9:24-28 '61.

(Coal) (Furnaces)

ILIEVA, M., uchitelka [Sofiia]; ZHEKOVA, Em, uchitelka [Sofiia]

Metallurgy of cast-iron in 9th class; lecture with films. Biol i khim 4 no.5:44-46 '61.

(Metallurgy) (Castiron)

HARAKOV, R., inzh.; ZHEKOVA, D.

Possibilities of analyzing small quantities of boron, bismuth and aluminum in ductile cast iron. Mashinostroene 12 no. 11:43-44 N '63.

1. TsZL pri DMZ "G. Dimitorv", Ruse.

ZHEKOVA, Em.; GULCBOV, Iv.

Results and conclusions from the chemistry examinations in the secondary schools. Biol i khim 7 no.4:34-38 '64

ZHEKHOVA, K.

Glory of these days will never fall into silence. IUn.tekh. 2 no.10:12-17 O '57. (MIRA 10:10)
(Russia--Revolution, 1917-1921)

ZHEKOVA, I.A.

Cancer metastasis in the jaw. Stomatologiia 36 no.1:52 Ja-F '57.
(MIRA 11:1)

1. Iz kafedry patologicheskoy anatomii (zav. - prof. B.I.Migunov) Moskovskogo meditsinskogo stomatologicheskogo instituta (dir. - dotsent G.N.Beletskiy) i iz patologoanatomicheskogo otdeleniya (zav. S.G.Vinogradov) 2-y gorodskoy moskovskoy infektsionnoy bol'nitsy (glavnyy vrach A.M.Pyl'tsova)
(JAW--CANCER)

RUBIN, L.R.; ZHUKOVA, I.A.; KORAL'NIK, L.N.

Clinical and morphological examinations of teeth with inflamed pulp. Stomatologiia 38 no.1:34-40 Ja-F '59. (MIRA 12:3)

1. Iz Moskovskogo meditsinskogo stomatologicheskogo instituta (dir. - dots. G. N. Beletskiy)
(TEETH--DISEASES)

ZHEKOVA, M.

SURNAME (in capn); Given Names

Country: Bulgaria

Academic Degrees:

Affiliation: Senior Laboratory Worker at the Therapeutic Clinic of the Advanced Medical Institute (VMI)

Source: Sofia, Sreden Meditsinski Rabotnik, No 1, 1961, pp 44-45

Data: "The Work Organization in Clinical Laboratories."

ZHEKULIN, L. [A.]

"Propagation of Electromagnetic Signals in Coaxial Cable," Iz. Ak. Nauk SSSR, Otdel. Tekh. Nauk, No. 3, 1941. Submitted 21 Oct 1940.

[redacted] Report U-1530, 25 Oct 1951

ZHEKULIN, L. A.

PA 26T100

USSR/Radio Sep 1947
Cables, Coaxial
Cables - Mechanical Properties

"The Effect of Heterogeneity on the Parameters of Coaxial Cables," L. A. Zhekulin, 17 pp

"In Ar Mauk, Tekh Nauk" No 9

Coaxial cables always have some defect, usually that of a nonuniform diameter. This fluctuation of diameter frequently results in a break in the cable. If an electric current conduit is on the inside, a difference of diameter makes it possible for the wire to move around in the inside of the cable. The author discusses the wave method, and

26T100

USSR/Radio (Cont'd) Sep 1947

the capacity as well as the induction method of testing a cable for even diameter. Mathematical formulae, cross-section diagrams of cables, and graphs as a result of calculations using the given formulae. Submitted by B. A. Vvedenskiy at the Mar 1947 meeting of the Technical Sciences Section, Academy of Sciences of the USSR.//

26T100

ZHEKULIN, L. A.

USSR/Radio Jan/Feb 1948
Cables, Coaxial
Television

"Propagation of Signals in a Coaxial Cable," Prof L. A. Zhekulin, Dr Tech Sci, 14 pp

"Radiotekh" Vol III, No 1

Discusses nonstationary processes in coaxial cables, arising during transmission of television signals. Suggests graphic-analytical approximation method to determine the fundamental operator equation for the probem. Studies distortion of signals during their propagation along the cable. Describes method to conform reflections during determination of primary and secondary parameters of cables with cylindrical surfaces of arbitrary shapes. Submitted 16 Jul 1947.

64T105

ZHEKULIN, L.A.,

ZHEKULIN, L.A., doktor tekhn.nauk, prof.

William Thomson, 1824-1907). Elektrichestvo no.12:64-69 D '57.
(MIRA 10:12)
(Kelvin, William Thomson, 1824-1907)

ZHEKULIN, L.A.

29(0)

PHASE I BOOK EXPLOITATION SOV/1658

Akademiya nauk SSSR

Iskusstvennyye sputniki zemli, vyp. 1: Rezul'taty nauchnykh issledovaniy, provedennykh po programme MGG pri pomoshchi pervogo i vtorogo iskusstvennykh sputnikov zemli (Artificial Earth Satellites, Nr 1: Results of Scientific Studies Carried Out in Accordance With the IGY Program by Means of the First and Second Artificial Earth Satellites) Moscow, Izd-vo AN SSSR, 1958. 95 p. 3,500 copies printed. [Microfilm and Xerox Copy]

Resp. Ed.: L.V. Kurnosova; Ed. of Publishing House: B.M. Alekseyev; Tech. Ed.: T.V. Polyakova.

PURPOSE: This collection of articles is the first in a series to be published regularly and is intended to disseminate to the scientific community data collected in investigations performed by means of artificial earth satellites.

COVERAGE: This collection includes papers covering scientific data obtained from the first and second Soviet artificial earth satellites. Among the areas reported on are measurements of cosmic radiation, atmospheric density, electron concentration in the ionosphere, and biological studies of an animal occupant of a satellite. Papers on the motions and perturbations of satellite orbits and optical and Doppler methods of satellite tracking are also included. Coverage of the individual articles is given in the Table of Contents.

Zhekulin, L.A. Distribution of Electron Concentration as a Function of Altitude According to Data From Experiments With Rockets and Artificial Satellites, and Its Effect on the Propagation of Radio Waves. 67

This paper reviews important experimental data obtained in the USSR and other countries on the distribution of ionization as a function of altitude. These results introduce a substantial contribution to the study of the ionosphere and in high regions of the atmosphere to the problem of radio wave propagation, and indicate that in the highly ionized region between 100 and 200 km sharply defined layers are absent and smooth transitions exist between adjacent regions. In accordance with the new results, in the E region of the ionosphere there occurs an abrupt change in the ionization gradients, but the continuous and approximately monotonic increase of ionization with altitude is maintained. With increasing frequency, therefore, the reflection level of the electro-magnetic wave is gradually shifted to higher regions of the ionosphere. According to earlier ideas (on sharply defined layers in the ionosphere), during passage through the critical frequency the region of wave reflection shifts jumplike from the E layer to the higher F_1 or F_2 layers of the ionosphere. It is the frequency v_o which now plays the role of critical frequency at which the dielectric permeability for the ionization density N_o, corresponding to the level of abrupt change in ionization gradient, becomes equal to zero. [illegible] through the frequency v_o, the effective altitude of the [illegible] sharply increases, and at the same time, the absorption of the [illegible] wave increases so that the intensity of the incoming signal [illegible] small. Envelope curves of signal establishment were constructed; the signals were reflected from the E and F regions of the ionosphere with ionization distributions corresponding to the latest experimental data. For small absorption in the ionized medium, the results obtained for a strict solution of the problem agree approximately with the conclusions of geometric optics. The author expresses his gratitude to V.I. Balashova and T.S. Romanova for their assistance in completing this report. There are 7 references, 3 of which are Soviet, 3 English, and 1 a translation from English.

3

ZHEKULIN, L. A.

X GENERAL ASSEMBLY OF THE INTERNATIONAL ASTRONOMICAL UNION
Moscow, 12-20 Aug. 58
Joint Discussion on Astronomical Observations made by means of Artificial Satellites, Rockets and Balloons

DISTRIBUTION OF ELECTRON CONCENTRATION AS A FUNCTION OF THE ALTITUDE ACCORDING TO THE DATA OF EXPERIMENTS WITH ROCKETS AND EARTH SATELLITES AND ITS INFLUENCE ON THE PROPAGATION OF RADIOWAVES

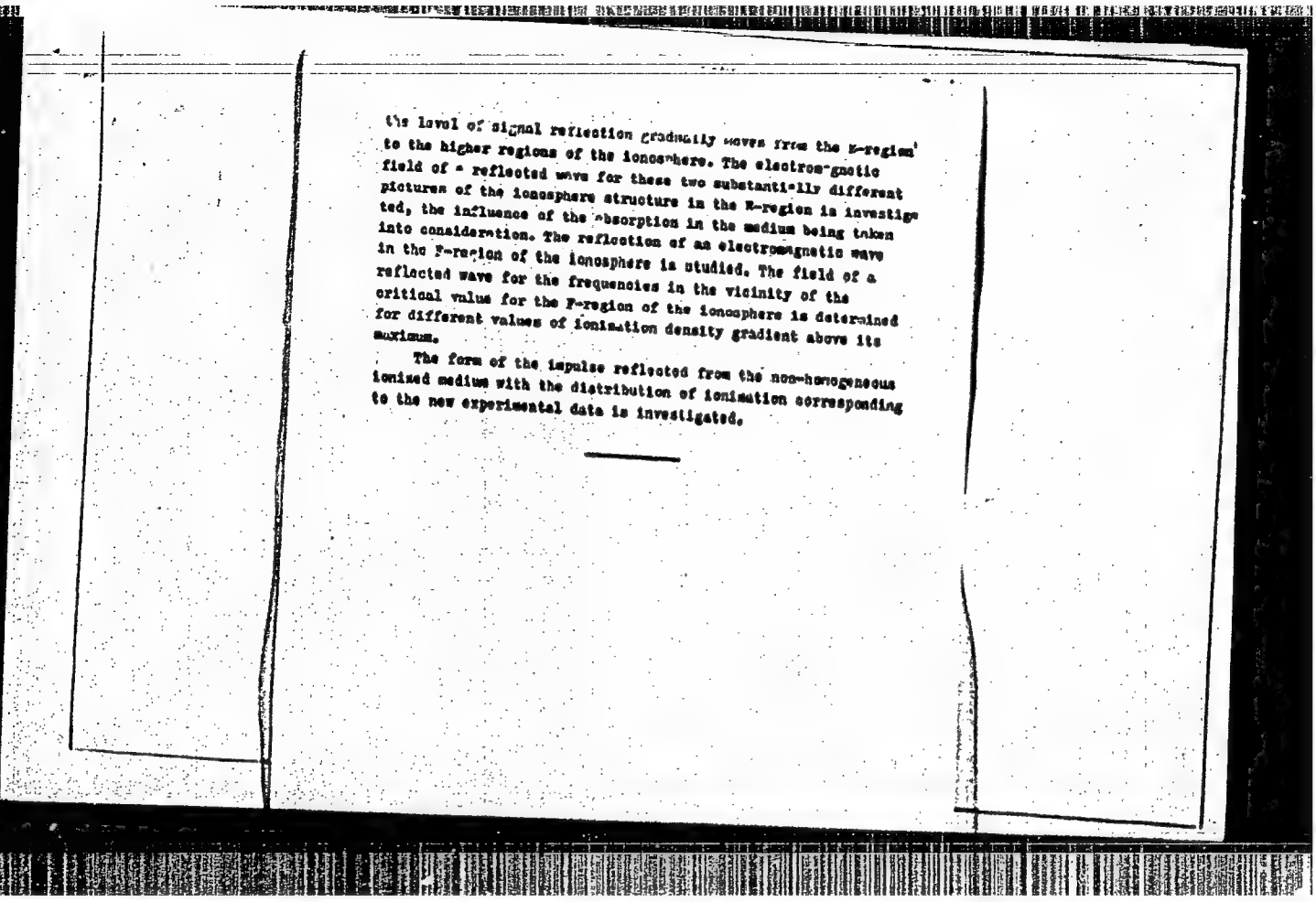
L.A. Zhekulin

Summary of the report

The propagation of radiowaves in a non-homogeneous ionised medium with the distribution of ionisation obtained by recent studies of the ionosphere structure is considered.

Using the wave interpretation of the problem, the expressions for the intensity of the electric field in terms of the Airy functions are found. The results obtained are compared with an approximate solution derived on the basis of geometric optics.

According to recent experimental data a change of the ionisation gradient occurs in the E region of the ionosphere, and an approximately monotonous increase of the ionisation density with the altitude is preserved.



the level of signal reflection gradually moves from the E-region to the higher regions of the ionosphere. The electromagnetic field of a reflected wave for these two substantially different pictures of the ionosphere structure in the E-region is investigated, the influence of the absorption in the medium being taken into consideration. The reflection of an electromagnetic wave in the F-region of the ionosphere is studied. The field of a reflected wave for the frequencies in the vicinity of the critical value for the F-region of the ionosphere is determined for different values of ionization density gradient above its maximum.

The form of the impulse reflected from the non-homogeneous ionized medium with the distribution of ionization corresponding to the new experimental data is investigated.

ZHEKULIN, L.A.

Distribution of electron density over the altitude according to the data of rocket and artificial satellite observations and the effect of this distribution on radio wave propagation. Isk.sput. Zem. no.1:67-79 '58. (MIRA 12:2)
(Atmosphere, Upper--Rocket observations)
(Ionospheric radio wave propagation)

AUTHORS: Neyman, L. R., Polivanov, K. M., Zhekulin, L. A., Gonorovskiy, I. S., Solov'yev, I. I., Tsypkin, Ya. Z., Gavrilov, M. A, Ul'yanov, S. A., Lavrov, V. M. and others

SOV/105-58-7-29/32

TITLE: Professor G. I. Atabekov (Professor G. I. Atabekov To His 50th Birthday (K 50-letiyu so dnya rozhdeniya)

PERIODICAL: Elektrichestvo, 1958, Nr 7, pp. 93 - 93 (USSR)

ABSTRACT: Professor Grigoriy Iosifovich Atabekov, Doctor of Technical Sciences, was born in 1908. In 1930 he graduated from the Elektromekhanicheskiy fakultet Tbilisskogo politekhnicheskogo instituta (Dept. of Electromechanics at the Tbilisi Polytechnical Institute). He worked as engineer in the Zakenergo, then moved to Moscow where he worked as chief engineer in the Mosenergo and then in the Teploelektro-proyekt. He worked out several distance-protection circuits which are used in energy systems. In 1945 an inertialess directed high-voltage protection device with a phase sensitive circuit was developed as control organ for the 400 kV transmission line from the Kuybyshev Power Plant to Moscow

Card 1/2

Professor G. I. Atabekov. To His 50th Birthday SOV/105-58-7-29/32

under his supervision in the TsNIEL of the Ministry of Electric Power Stations. In 1950 he was awarded the Stalin Prize for the development and introduction of the mass production of directed high-voltage filter protection device for electric supply lines. Since 1946 he is head of the Department of Theoretical Foundations of Electrical Engineering at the Moskovskiy aviatsionnyy institut (Moscow Institute of Aeronautics). He made 48 inventions and published 98 scientific papers. He is member of the editorial staff of the periodical "Izobretatel'stvo v SSSR" ("Inventions in the USSR") and the periodical "Izvestiya vysshikh uchebnykh zavedeniy" (Energetika) ("University News" (Power Engineering)). His papers were translated and published in Hungary, Rumania , and China. There is 1 photograph.

1. Scientific personnel--USSR

Card 2/2

MINTS, A.L., akademik, glavnyy red.; BURDUN, G.D., red.; VOL'PERT, A.R., red.; GORON, I.Ye., red.; GUTENMAKHER, L.I., prof., red.; GRODNEV, I.I., red.; DEVYATKOV, N.D., red.; ZHEKULIN, L.A., red.; KATAYEV, S.I., red.; MEYMAN, M.S., red.; SIFOROV, V.I., red.; CHISTYAKOV, N.I., red.; GESSEN, L.V., red.izd-va; MARKOVICH, S.G., tekhn.red.

[One hundredth anniversary of the birth of A.S.Popov; jubilee session] 100 let so dnia rozhdeniia A.S.Popova; iubileinaia sessiia. Moskva, Izd-vo Akad.nauk SSSR, 1960. 312 p. (MIRA 14:1)

1. Nauchno-tekhnicheskoye obshchestvo radiotekhniki i elektrosvyazi. (Information theory)

BESSONOV, L.A.; DOMANSKIY, B.I.; DROZDOV, N.G.; D'YACHENKO, N.Kh.; ZHEKULIN, L.A.; ZAYTSEV, I.A.; ZALESSKIY, A.M.; KAMENSKIY, M.D.; KOSTENKO, M.P.; LEBEDEV, A.A.; LOMONOSOV, V.Yu.; MITKEVICH, A.V.; SMIRNOV, V.S.; TOLSTOV, Yu.G.; USOV, S.V.; SHRAMKOV, Ye.G.

L.R. Neiman; on his 60th birthday and the 35th anniversary of his educational work. Elektrichestvo no.6:93-94 Je '62. (MIRA 15:6)
(Neiman, Leonid Robertovich, 1902-)

SIROTINSKIY, L.I.; POLIVANOV, K.M.; NETUSHIL, A.V.; BABIKOV, M.A.; SYROMYATNIKOV, I.A.; DROZDOV, I.G.; FEDOSEYEV, A.M.; CHILIKIN, M.G.; BESSONOV, L.A.; BUTKEVICH, G.V.; ZHEKULIN, L.A.; NEYMAN, L.R.; GORTINSKIY, S.M.; SMIRNOV, A.D.; MANIKONYANTS, L.G.; PETROV, I.P.

Vsevolod IUr'evich Lomonosov; obituary. Elektrichestvo no.12:88 D '62. (MIRA 15:12)

(Lomonosov, Vsevolod IUr'evich, 1899-1962)

BORISENKO, N.I.; BUTKEVICH, G.V.; VORONETSKIY, B.B.; VASIL'YEV, D.V.; DROZDOV, N.G.; DUBINSKIY, L.A.; ZALESSKIY, A.M.; KASATKIN, A.S.; KOSTENKO, M.P.; KUZNETSOV, P.I.; KULEBAKIN, V.S.; MAMIKONYANTS, L.G.; MEL'NIKOV, N.A.; NEYMAN, L.P.; PETROV, I.I.; RABINOVICH, S.I.; SAMOKHVALOV, V.A.; SOLODOVNIKOV, V.V.; STEKLOV, V.Yu.; SYROMYATNIKOV, I.A.; FEDOSEYEV, A.M.; CHILIKIN, M.G.; SHATALOV, A.S.; ZHEKULIN, L.A.

Petr Ivanovich Voevodin, 1884- ; on his 80th birthday. Elektrichestvo no.9:92 S '64. (MIRA 17:10)

ZHEKULIN, V.S.

Some ideas on historical geography. Izv. Vses. geog. ob-va 97 no.1: 63-66 Ja-F '65.

(MIRA 18:3)

ZHEKULIN, S.A.

Development of intellectual operations in the course of problem solving by school children. Vop. psikhol. 11 no.2:79-90 Mr-Ap '65. (MIRA 18:6)

1. Pedagogicheskiy institut, Kalinin.

ZHEKULIN, V.S.

From the practice of making a landform map for a regional geographical atlas. Izv.Vses.geog.ob-va 94 no.2:176-177 Mr-Ap '62.
(MIRA 15:5)

(Tambov Province—Maps)

ZHEKULIN, V.S.

"Nature and economy of Kalinin Province"; Studies of the Natural Science and Geograph Faculty of the Kalinin State Pedagogical Institute. Reviewed by V.S. Zhekulin. Izv. Vses. geog. ob-va 93 no.4:355-357 Jl - Ag '61. (MIRA 14:7)
(Kalinin Province--Economic geography)

ZHEKULIN, V.S.

Effect of lakes on the morphology of land forms as illustrated in the northwestern part of the R.S.F.S.R. [with summary in English]. Vest.LGU 13 no.12:108-115 '58. (MIRA 11:12)
(Physical geography)

ZHEKULIN, V.S., Cand Geog Sci -- (diss) " Types of lake landscapes in the ~~North-west~~ (northwestern) RSFSR (on the ~~question~~ problem of the typology of geographic landscapes)." Len 1958, 17 pp. (Len Order of Lenin State Univ im A.A. Zhdanov) 150 copies (KL, 39-58, 107)

ZHEKULIN, V.S.

Typology of landscapes. Izv. Vses. geog. ob-va 90 no.2:153-158 Mr-Ap '58. (MIRA 11:5)

(Landscape)

AUTHOR: Zhekulin, V.S. 12-90-2-7/30

TITLE: On the Classification of Landscapes (K voprosu o tipologii landshaftov)

PERIODICAL: Izvestiya Vsesoyuznogo Geograficheskogo Obshchestva, 1958, Vol. 90, Nr 2, pp 153-158 (USSR)

ABSTRACT: Although the systematism of landscapes is extremely important in various fields, it is a fact that until the present the classification of landscapes was not sufficiently dealt with. Methods of combining geographic landscapes into types - the simplest classification unit are described, including a study of their structures. Natural boundaries and environments are genetically connected combinations which form the morphological structure. Structural elements, such as principal correlations between components, dominating natural boundaries and environments, form the type. Table 1 contains components of environments, natural boundaries and landscapes. The characteristic features of lake-landscapes in the north-west of the RSFSR are described and illustrated by 2 tables. There are 10 Soviet references.

AVAILABLE: Library of Congress

Card 1/1 1. Landscapes-Classification

AUTHOR: Lomberg, B. S.; Vertman, A. A.; Yakobson, A. M.; Cheladnov, V. I.; Polyakov, A. Yu.

ORG: Institute of Metallurgy im. A. A. Baykov (Institut metallurgii)

TITLE: Unit for measuring the interphase metal-slag tension at high temperatures

SOURCE: Zavodskaya laboratoriya, v. 31, no. 8, 1965, 1020-1021

TOPIC TAGS: furnace, slag, thermocouple, vacuum seal, x ray application, molten metal, corundum, magnesite

ABSTRACT: This device is a resistance furnace with a two-filament heater. A crucible is placed in the isothermal zone of the heater on a magnesite support. The melting point is measured with a platinum-platinum-rhodium thermocouple set on the bottom of the crucible. A device mounted on the top cover permits adding of slag during the experiment. Sealing of the assembly is done with vacuum seals. Viewing windows are covered with 0.1-0.2 mm thick aluminum foil. Construction of the unit permits its operation in either a vacuum or in a neutral gas atmosphere. Experiments were conducted on corundum and magnesite crucibles, 35 mm in diameter. A substrate cut from a cylindrical crucible of smaller diameter made of the same material is placed on the bottom of the crucible. Diameter of the metal drop on this substrate is 18-20 mm. To obtain an upper edge of the

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ACC NR: AP6013575

substrate border in the form of a true sphere, it is polished with convex and concave spheres. This provided for symmetry of the liquid metal drop. X-rays were taken with an RUP-1 x-ray device.

Because of the protective shields and the intensive water cooling of the furnace housing it is possible to place the film at a minimum distance from the object. The film is placed in an aluminum cassette protected from scattering radiation by lead plates, 2 mm thick. Distance from the center of the drop to the film is 10 cm and 110 cm to the focal point of the tube. A clear image of the metal drop in the slag is obtained when the voltage on the tube is 180 kilovolts, current force-15 milliamps, and at an exposure time of 40-60 seconds. The interphase stress is calculated according to the dimensions of the drops found. The interphase tension of certain nickel-base alloys with slags was determined. The unit can be recommended for measuring the interphase tension between metals and slags of different compositions. Orig. art. has: 2 figures and 1 table. [JPRS]

SUB CODE: 13 / SUBM DATE: none / ORIG REF: 001

Card 2/2 MLS

LOMBERG, B.S.; VERTMAN, A.A.; YAKOBSON, A.M.; ZHELADNOV, V.I.; POLYAKOV, A.Yu.

Apparatus for measuring the metal-slag interphase tension at high temperatures. Zav. lab. 31 no.8:1020-1021 '65. (MIRA 18:9)

1. Institut metallurgii imeni Baykova.

MUSATOV, A.,slesar'; KHOMYAKOV, S.,brigadir elektrikov; ZHELAGIN, G.,tokar';
SEMIOSHIN, M.,slesar';

Tool for straightening and cutting steel wire up to 6 mm. in diameter. Na stroi.Mosk. no.1:28 Ja '59. (MIRA 12:1)

1. Trest Mosstroy No.4 (for all). 2. Stroitel'nyy uchastok-21 (for Musatov, Khomyakov). 3. Stroitel'nyy uchastok-19 (for Semioshin, Zhelagin).
(Wire) (Cutting machinery)

KHROV, V., brigadir slesarey; ZHILAGIN, G., tokar'

Tool for trimming wallpaper and cutting borders. Na stroi. Mosk. no.1:29 Ja '59. (MIRA 12:1)

1. Stroitel'nyy uchastok - 19 tresta Mosstroy No.4.
(Paper hanging--Equipment and supplies)

ZHELAMSKIY, A.

The right direction. Radio no.8:16 Ag '63. (MIRA 16:9)

1. Nachal'nik radiokluba Dobrovol'nogo obshchestva sodeystviya armii, aviatsii i flotu, g. Kalinin.
(Radio clubs)

L 30230-66 EWT(m)/T/EWP(t)/ETI IJP(c) ES/WW/JD/JG

ACC NR: AP6013823 SOURCE CODE: UR/0189/65/000/006/0053/0056

50
B

AUTHOR: Koshcheyev, G. G.; Kovba, L. M.; Zhelankin, A. V.

ORG: Chair of Inorganic Chemistry, Moscow State University (Kafedra neorganicheskoy khimii, Moskovskiy gosudarstvennyy universitet)

TITLE: Study of binary oxides of uranium and rare earth elements

SOURCE: Moscow. Universitet. Vestnik. Seriya II. Khimiya, no. 6, 1965, 53-56

TOPIC TAGS: uranium compound, lanthanum oxide, samarium compound, dysprosium compound, ytterbium compound, X ray analysis, camera/RKD-57 camera, RKU-86 camera

ABSTRACT: The formation of fluorite-type phases was investigated in R_2O_3-U_3O_8-O_2 systems (where R=La, Sm, Dy, Yb) annealed for 66-85 hr at 1200°C, and the solubility limits of the rare earth oxides in uranium octoxide were determined. The U(VI) content and the total uranium content were determined by coulometric analysis at a controlled potential. X-ray phase analysis was carried out by using the powder method with RKD-57 and RKU-86 cameras. The degree of oxidation of uranium changes with the ratio R/U and reaches 6 in samples where R/U=2/1. Thus, the presence of a rare earth oxide increases the stability of the hexavalent state of uranium at high temperatures. Contrary to expectations, the solubility of rare earth oxides in U_3O_8 was found to be very low (less than 1.5 mol % of $RO_{1,5}$). Orig. art. has: 3 tables.

SUB CODE: 07,14/ SUBM DATE: 11Jan65/ ORIG REF: 002/ OTH REF: 002

Card 1/1 UDC: 546

L 34346-66 EWT(m)/EWP(t)/ETI IJP(c) ES/JD/WW/JG

ACC NR: AP6010714 (N) SOURCE CODE: UR/0189/66/000/001/0054/0056

AUTHOR: Koshcheyev, G. G.; Rachev, V. V.; Ippolitova, Ye. A.; Zhelankin, A. V. 48 B

ORG: Inorganic Chemistry Department, Moscow State University (Kafedra neorganicheskoy khimii, Moskovskiy gosudarstvennyy universitet)

TITLE: Determination of the oxygen/uranium ratio in uranium oxides by controlled-potential coulometric analysis

SOURCE: Moscow. Universitet. Vestnik. Seriya II. Khimiya, no. 1, 1966, 54-56

TOPIC TAGS: uranium, electrochemical analysis, oxygen, electrolysis

ABSTRACT: The authors investigated the applicability of the coulometric method proposed by W. M. Mac Nevin and B. B. Baker (Anal. Chem. 24, 986, 1952) to the determination of the ratio O/U in uranium oxides. The latter were dissolved in concentrated orthophosphoric acid, and a 1 M H_2SO_4 solution was used as the background solution. Uranium (VI) was reduced at a cathode potential of -0.24 V for 3-4 min, and the current intensity was recorded every 15-30 sec. To determine the total uranium, U(IV) was oxidized chemically to U(VI) by cerium (IV) at a cathode potential of -0.05 V, then uranium was again reduced as before. The amount of uranium was calculated from the formula

$$U(VI) = \frac{E_U \times I_Q}{96.5 \times 2.303 \times K},$$

Card 1/2 UDC: 536.7

Card 2/2 UDC:

KOSHCHEYEV, G.G.; KOVBA, L.M.; ZHELANKIN, A.V.

Double oxides of uranium and rare-earth elements. Vest. Mosk. un. Ser. 2: Khim. 20 no.6:53-56 N-D '65. (MIRA 19:1)

1. Kafedra neorganicheskoy khimii Moskovskogo universiteta. Submitted Jan. 11, 1965.

ZHELANKIN, G.I., inzh.

Load determination and estimation of the stability of facing slabs of a slope during the action of ice frozen to them. Trudy TSNIIEVT no. 19:112-120 '60. (MIRA 14:5)
(Piers) (Ice on rivers, lakes, etc.)

ZHELANKIN, G., inzh.; LEVACHEV, S., inzh.

Embankments of lightweight construction. Rech. trans. 21 no.9:35-37 S '62. (MIRA 15:9)

(Embankments)

ZHELANKIN, G.

Calculation of anchored sheetpiling based on limiting states.
Rech. transp. 24 no.6:41-43 '65. (MIRA 18:8)

1. Glavnyy spetsialist Gosudarstvennogo instituta proyektirovaniya i izyskaniya na rechnom transporte.

ZHELANKIN, G.I., inzh.

Determining the state of strain in slabs covering canal banks under the effect of ice frozen to the banks following a reduction of the water level. Rech.transp. 18 no.11:36-39 N '59. (MIRA 13:4)

(Hydraulic engineering) (Ice on rivers, lakes, etc.)

ZHELANKIN, V.I.; KUTSEV, V.S.; ORMONT, B.F.

Study of equilibrium in the reduction of ZrO_2 by V_2O_3 by carbon at high temperatures. Zhur. neorg. khim. 3 no.5:1237-1240 My '58. (MIRA 11:6)

1.Fiziko-khimicheskiy institut im. L.Ya. Karpova i Vsesoyuznyy nauchno-issledovatel'skiy institut tverdykh splavov.
(Vanadium oxides) (Zirconium oxides) (Carbon)

ACCESSION NR: AP4033396 S/0076/64/038/003/0562/0564

AUTHORS: Zhelankin, V.I. (Moscow); Kutsev, V.S. (Moscow)

TITLE: Heat of formation of hafnium carbide as a function of composition

SOURCE: Zhurnal fizicheskoy khimii, v. 38, no. 3, 1964, 562-564

TOPIC TAGS: hafnium carbide, heat of formation, heat of combustion, calorimetry, thermochemistry

ABSTRACT: In this work Hf metal, HfO_2 and graphite were ground and screened through a 250 - 300 mesh sieve, then they were thoroughly mixed and pressed under 150 atm pressure. Synthesis of preparations was done in a resistance wound furnace with a carbon heater in a 10^{-3} mm vacuum at 2100°. All of the obtained preparations were subjected to chemical and x-ray analysis. For determination of the heat of combustion of hafnium carbide use was made of an isothermal bomb calorimeter, 100 cm^3 capacity. The heat capacity of the calorimeter was 1041.5 ± 1.5 $cal_{20°}/deg$, determined from the combustion of standard benzoic acid (Q = 6320 cal/g). Burning 0.7 g of hafnium

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carbide powder increased the temperature of the calorimeter liquid by 1.10. To insure better combustion it was conducted in a HfO_2 lined quartz furnace. The powder was placed in a thin layer on cotton fabric and was lighted by means of an iron wire. The combustion product was loose. When the oxygen pressure was 15 - 20 atm combustion proceeded smoothly. The combustion products were subjected to chemical analysis for unburned carbon. Completion of burning was conducted in an oxygen stream at 1000. The combustion products were controlled for content of CO_2 with barium hydroxide and also by volume measurement. X-ray analysis indicated only HfO_2 lines. The heat of combustion of the HfO of stoichiometric composition is 305.9 kcal/mole. When the composition is changed from $HfO_{0.67}$ to HfO the heat of combustion changes by 28 kcal/mole and the heat of formation by 2.5 kcal/mole. Orig. art. has: 1 table

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ZHELANKIN, V.I.; KUTSEV, V.S.; ORMONT, B.F.

Conditions of the formation of hafnium carbide in the reduction of HfO_2 by carbon. Zhur. neorg. khim. 7 no.8: 1762-1764 Ag '62. (MIRA 16:6)

(Hafnium oxide) (Hafnium carbides)

ACC NR: AT6033686 SOURCE CODE: UR/3231/66/000/001/0031/0053

AUTHOR: Kondorskaya, N. V.; Zhelankina, T. S.; Mobel', S. S.; Vartanova, L. Yu.

ORG: none

TITLE: Certain results of using an electronic computer to collate seismic observations

SOURCE: AN SSSR, Institut fiziki Zemli. Vychislitel'naya seysmologiya, no. 1, 1966. Analiz seysmicheskikh nablyudeniy naelektronnykh mashinakh (Use of electronic computers in the analysis of seismic observations), 31-53

TOPIC TAGS: electronic computer, data analysis, earthquake, seismologic station, computer program

ABSTRACT: The article analyzes the experience gained in the more precise determination of the coordinates of earthquake epicenters with the aid of an electronic computer by the method described by I. I. Pyatetskiy-Shapiro et al. (DAN SSSR, 1963, 151, no. 2, 323) (the "EPI-1" program). The epicenter coordinates were determined by the USSR Meteorological Service when drafting composite seismic bulletins for the period from the 4th quarter of 1960 until 1963. The use of the EPI-1 program proved beneficial in that it increased the number of the determined epicenters by a factor of 1.5, enhanced the accuracy of their determination, and

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led to the solution of additional problems: a) an averaged law of the distribution of closing errors f_K (deviations from the standard Jeffreys-Bullen hodograph) was found for seismic stations in the USSR; b) the accuracy of determination of the epicenters of earthquakes occurring in various parts of the terrestrial globe (Central Asia, Kuriles-Kamchatka Arc, Japan, Alaska, California, etc.)is estimated,with the regions being divided into 4 groups according to the accuracy of determination; c)the possibility of the coincidence of findings with respect to the accuracy of determination of epicenter coordinates is proved as regards observational findings from ~90 foreign stations and 14 Soviet stations with enhanced accuracy of observations. The dependence of the accuracy of determination of epicenter coordinates on the depth of the earthquake focus is demonstrated. "In conclusion, the authors are indebted to V. I. Keylis-Borok for his comments on this project." Orig. art. has: 7 figures, 8 formulas, 6 tables.

SUB CODE: 09 08 17/ SUBM DATE: none/ ORIG REF: 003/ OTH REF: 004

Card 2/2

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ZHELANOV, S.P

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